

**CLAIMS:**

1. A black-and-white thermographic material comprising a support having thereon at least one thermally sensitive imaging layer comprising a binder, and further comprising:
  - 5 a) a non-photosensitive source of reducible silver ions,
  - b) a reducing agent for said reducible silver ions,
  - c) a color developing agent precursor that releases a color developing agent when heated to a temperature of at least 80°C, and
  - d) a cyan dye-forming color coupler, or a combination of a  
10 cyan dye-forming color coupler and a magenta dye-forming color coupler, said color couplers being capable of reacting with said released color developing agent to produce a cyan dye or a combination of cyan and magenta dyes.
2. The material of claim 1 comprising a cyan dye-forming  
15 color coupler but not a magenta dye-forming color coupler.
3. The material of claim 1 wherein said color developing agent precursor releases a *p*-phenylenediamine color developing agent upon heating to a temperature of at least 80°C.  
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4. The material of claim 1 wherein said non-photosensitive source of reducible silver ions is provided as a nanoparticulate dispersion.
5. The material of claim 1 wherein said non-photosensitive  
25 source of reducible silver ions includes one or more silver carboxylates, one of which is silver behenate.
6. The material of claim 5 wherein said non-photosensitive source of reducible silver ions includes highly crystalline silver behenate.  
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7. The material of claim 1 wherein said reducing agent is a dihydroxybenzene compound or an aminophenol.

8. The material of claim 1 wherein said color developing agent precursor is present in an amount of from about 0.01 to about 2 mol per mole of total silver.

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9. The material of claim 1 wherein said cyan dye-forming color coupler or combination of a cyan dye-forming color coupler and a magenta dye-forming color coupler are present in an amount of from 0.005 to 0.1 mol per mole of reducible silver ions.

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10. The material of claim 1 wherein the amount of total silver is at least 0.002 mol/m<sup>2</sup>.

11. The material of claim 1 wherein said binder is a hydrophilic binder or a water-dispersible polymer latex binder.

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12. The material of claim 1 further comprising a toning agent that is a phthalazinone or phthalazinone derivative, that is present in an amount of from about 0.01 to about 10% based on the total dry weight of the layer in which it is located.

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13. The material of claim 1 that is duplitized, having one or more of the same or different imaging layers on both sides of said support.

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14. The material of claim 1 further comprising a protective layer over said one or more imaging layers.

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15. A black-and-white, non-photosensitive thermographic material that comprises a transparent polymer support having on only one side thereof one or more thermally sensitive imaging layers and an outermost non-thermally sensitive protective layer over said one or more thermally sensitive imaging layers,

said one or more thermally sensitive imaging layers comprising one or more hydrophilic binders, and in reactive association:

- a) a non-photosensitive source of reducible silver ions that includes one or more silver aliphatic carboxylates at least one of which is silver behenate,
- b) a reducing agent for said non-photosensitive source reducible silver ions comprising a dihydroxybenzene or an aminophenol,
- c) a color developing agent precursor that releases a *p*-phenylenediamine color developing agent when heated to a temperature of at least 80°C, and
- d) a toning agent, and
- e) a cyan dye-forming color coupler that is capable of reacting with said released color developing agent to produce a cyan dye, said cyan dye-forming color coupler being present in an amount from 0.005 to 0.1 mole per mole of reducible silver ions, and the amount of silver is at least 0.002 mol/m<sup>2</sup>.

16. The material of claim 15 wherein said hydrophilic binder is gelatin or a derivative thereof, a cellulosic material, or a poly(vinyl alcohol).

17. The material of claim 15 wherein said color developing agent precursor is present in an amount of from about 0.01 to about 2 mol per mole of total silver, and said toning agent is a phthalazinone or phthalazinone derivative that is present in an amount of from about 0.01 to about 10% based on the total dry weight of the layer in which it is located.

18. A method comprising imaging the thermographic material of claim 1 with a thermal imaging source to provide a visible image.

19. The method of claim 18 wherein said thermographic material comprises a transparent support and said image-forming method further comprises:

positioning said imaged thermographic material with the visible image thereon between a source of imaging radiation and an imageable material that is sensitive to said imaging radiation, and

thereafter exposing said imageable material to said imaging radiation  
5 through the visible image in said imaged thermographic material to provide an image in said imageable material.

20. A method comprising imaging the thermographic material of claim 15 with a thermal imaging source to provide a visible image.  
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21. The method of claim 18 wherein said imaging is carried out using a thermal print head or a laser.

22. The method of claim 18 further comprising using said  
15 imaged thermographic material for medical diagnostic purposes.